

Technical Attachment

Climatological Probabilities of Precipitation for 3-, 6-, 12-, and 24-hr Periods

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NWS Southern Region

Matt Sitkowski, an NWS SCEP student and meteorology undergraduate at Florida State University, has undertaken an analysis of precipitation frequencies over the southern United States. Begun last year with support from a COMET Partner's Project, Matt will be completing his study this year as a Senior Honors Project. Using hourly precipitation data (HPD) for the most recent 30 years (1968-97) which were obtained on CD from FSL/NCDC, Matt is calculating monthly precipitation frequencies for 3-, 6-, 12-, and 24-hr periods for over 300 sites in Southern Region. He will also examine topographic, regional, seasonal and diurnal trends. Precipitation frequencies for the four time intervals (from 3- to 24-hr) will provide forecasters with valuable guidance to assist with PoP forecasts in IFPS as efforts are made to focus on shorter time periods. Matt's results can be seen at <http://bertha.met.fsu.edu/~sitkow/>. Below is a sample of one 3-hour graphic, and an example of how Matt's results might be utilized.

